

Claims

1. A hydropneumatic suspension having at least one suspension cylinder (10) and at least one hydraulic accumulator configured as a suspension accumulator (18) and having a pilot-actuated valve (20) for opening or blocking a fluid-carrying connection between the suspension cylinder (10) and the suspension accumulator (18), **characterized in that** the pilot-actuated valve (20) may be moved into the blocked position by means of a hydraulic actuating assembly (22), in that the hydraulic actuating assembly (22) taps the fluid pressure between suspension accumulator (18) and associated suspension cylinder (10) and forwards such fluid pressure by way of a switching valve (24) to an operating side (26) of the pilot-actuated valve (20) by way of at least one pilot-actuated line (38), and in that another proportional valve (50) may be connected to or switched to respective associated pilot-actuated line (38) between one switching valve (24) and the pilot-actuated valve (20).
2. The hydropneumatic suspension as claimed in claim 1, wherein the other valve (50) is a proportional-pressure control valve.
3. The hydropneumatic suspension as claimed in claim 1 or 2, wherein the pilot-actuated valve has two operating sides (26, 42), one with a pilot-actuated component (40) and the other with a reset spring (48) and wherein both operating sides (26, 42) are connected to a fluid line in the form of a first and a second pilot-actuated line (38, 44).
4. The hydropneumatic suspension as claimed in claim 2 or 3, wherein the proportional pressure control valve (50) is mounted between the first valve (24) and a branch connection (46) which has a fluid-carrying connection to the tank T and to which the second pilot-actuated line (44) of the pilot-actuated valve (20) is connected.

5. The hydropneumatic suspension as claimed in claim 2 or 3, wherein the proportional-pressure control valve (50) is connected to the first pilot-actuated line (38) and wherein there is connected to the secondary branch (58) to this proportional-pressure control valve (50) a return valve (60) which opens in the direction of the pilot-actuated valve (20).
6. The hydropneumatic suspension as claimed in claim 5, wherein the first pilot-actuated line (38) of the pilot-actuated valve (20) is connected to the fluid-carrying output (36) of the first valve (24) in the form of the switching valve.
7. The hydropneumatic suspension as claimed in claim 2 or 3, wherein the proportional-pressure control valve (50) connected to the first pilot-actuated line (38) is secured as a form of a bridge circuit (64) from a possible wrong direction of fluid flow by way of return valves (66).
8. The hydropneumatic suspension as claimed in one of claims 1 to 7, wherein the pilot-actuated valve (20) is a proportional valve in the form of a 2/2-way valve.
9. The hydropneumatic suspension as claimed in one of claims 1 to 8, wherein the first valve (24) is a 3/2-way seat valve.
10. The hydropneumatic suspension as claimed in one of claims 1 to 9, wherein the pilot-actuated valve (20) is a proportional valve.